

Appl. No. 10/716,307
Amdt. Dated May 23, 2006
Reply to Office action of February 23, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-6. (Cancelled)

7. (Currently amended) A powder preheating system comprising:
a first tube having an auger screw for moving a powdered material through the first tube;
means for heating the first tube such that the powdered material moving
through the first tube is heated to a predetermined temperature without melting the powdered
material, the means for heating being coupled to an outer portion of the first heated tube; and
a hopper coupled to the first heated tube and staged for dispensing the heated powdered
material;and

a second heated tube coupled to the first heated tube to facilitate recirculating the
powdered material between the first and second heated tubes.

8. (Cancelled)

9. (Currently amended) The powder preheating system of claim 8, wherein the first
and second heated tubes are heated via first and second water jackets having heated water
flowing therethrough, the first and second water jackets substantially surrounding a
circumference of the first and second heated tubes.

10. (Original) The powder preheating system of claim 9, wherein the first and second
water jackets are baffled to facilitate even distribution of the water around the circumference of
the first and second heated tubes.

11. (Currently amended) A powder preheating system comprising:
a first tube having an auger screw for moving a powdered material through the first tube;
means for heating the first tube such that the powdered material moving
through the first tube is heated to a predetermined temperature without melting the powdered

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material, the means for heating being coupled to an outer portion of the first heated tube;

a hopper coupled to the first heated tube and staged for dispensing the heated powdered material;

a second heated tube coupled to the first heated tube to facilitate recirculating the powdered material between the first and second heated tubes; and

The powder preheating system of claim 8, further comprising a third tube coupled to the first and second heated tubes to store the powdered material.

12. (Original) The powder preheating system of claim 11, wherein the first, second, and third tubes are coupled via a horizontal auger screw, the horizontal auger screw employed to move the powdered material between the first, second, and third tubes.

13. (Original) The powder preheating system of claim 12, wherein the horizontal auger screw includes a flight restrictor on a portion of the horizontal auger screw to control an amount of powdered material moving between the first, second, and third tubes.

14. (Original) The powder preheating system of claim 11, further comprising a normally closed gate coupled to a bottom portion of the third tube.

15. (Original) The powder preheating system of claim 11, wherein the third tube is heated via a water jacket substantially surrounding the third tube.

16. (Original) The powder preheating system of claim 11, further comprising a vacuum conveyor coupled to a top portion of the third tube to draw the powdered material from a storage container into the third tube.

17. (Original) The powder preheating system of claim 11, further comprising a sensor located in the third tube to sense when the powdered material is at or below a predetermined level.

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18. (Currently amended) The powder preheating system of claim 8-7, further comprising a sensor located in at least one of the first and second heated tubes to sense when the powdered material is at or below a predetermined level.

19. (Original) The powder preheating system of claim 7, further comprising a vibration chute coupled to the hopper to facilitate flow of the powdered material from the hopper.

20. (Original) The powder preheating system of claim 7, further comprising a first scale to measure an amount of powder to be colored.

21. (Original) The powder preheating system of claim 20, further comprising a second scale to measure an amount of powdered material dispensed from the hopper.

22. (Original) The powder preheating system of claim 7, further comprising a scale to measure an amount of powdered material dispensed from the hopper.

23. (Original) The powder preheating system of claim 7, further comprising a mixer to mix a pigment with the powdered material.

24. (Original) The powder preheating system of claim 23, further comprising a pigment receptacle to meter an amount of pigment into the mixer.

25. (Original) The powder preheating system of claim 7, wherein a portable electronic device is employed to operate the system.

26. (Currently amended) A powder preheating system comprising:
at least one tube having powdered material flowing therethrough;
means for heating the tube such that the powdered material flowing through the tube is also heated, wherein the powdered material is not melted within the tube;
means for recirculating the powdered material through the at least one tube;
means for feeding the powdered material from a storage bin to the at least one heated tube; and

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means for dispensing the heated powdered material from the at least one heated tube.

27. (Original) The powder preheating system of claim 26, further comprising means for coloring the powdered material.

28. (Cancelled)